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## RAW SEQUENCE LISTING

DATE: 04/03/2002

PATENT APPLICATION: US/09/929,546

TIME: 16:12:06

Input Set : N:\Crf3\RULE60\09929546.raw

Output Set: N:\CRF3\04032002\I929546.raw

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1 <110> APPLICANT: Bander, Neil H.
2 <120> TITLE OF INVENTION: TREATMENT AND DIAGNOSIS OF CANCER
3 <130> FILE REFERENCE: Lois M. Kwasigroch: BZL 242/028
4 <140> CURRENT APPLICATION NUMBER: 09/929,546
5 <141> CURRENT FILING DATE: 2001-08-13
6 <150> PRIOR APPLICATION NUMBER: 09/357,708
7 <151> PRIOR FILING DATE: 1999-07-20
8 <150> PRIOR APPLICATION NUMBER: US 08/838,682
9 <151> PRIOR FILING DATE: 1997-04-09
10 <150> PRIOR APPLICATION NUMBER: US 60/016,976
11 <151> PRIOR FILING DATE: 1996-05-06
12 <150> PRIOR APPLICATION NUMBER: US 60/022,125
13 <151> PRIOR FILING DATE: 1996-07-18
14 <160> NUMBER OF SEQ ID NOS: 21
15 <170> SOFTWARE: PatentIn version 3.0
16 <210> SEQ ID NO: 1
17 <211> LENGTH: 391
18 <212> TYPE: DNA
19 <213> ORGANISM: Mus sp.
20 <400> SEQUENCE: 1
21      tctcctgtca ggaactgcag gtgtcctctc tgagggtccag ctgcaacagt ctggacctga      60
22      actggtgaag cctgggactt cagtgaggat atcctgcaag acttctggat acacattcac      120
23      tgaatatacc atacactggg tgaagcagag ccatggaaag agccttgagt ggattggaaa      180
24      catcaatcct aacaatggtg gtaccaccta caatcagaag ttcgaggaca aggccacatt      240
25      gactgtagac aagtcctcca gtacagccta catggagctc cgcagcctaa catctgagga      300
26      ttctgcagtc tattattgtg cagctggttg gaactttgac tactggggcc aaggcaccac      360
27      tctcacagtc tcctcagcca aaacgacacc c                                391
28 <210> SEQ ID NO: 2
29 <211> LENGTH: 391
30 <212> TYPE: DNA
31 <213> ORGANISM: Mus sp.
32 <400> SEQUENCE: 2
33      ggggtgtcgtt ttggctgagg agactgtgag agtgggtgcct tggccccagt agtcaaagtt      60
34      ccaaccagct gcacaataat agactgcaga atcctcagat gttaggctgc ggagctccat      120
35      gtaggctgta ctggaggact tgtctacagt caatgtggcc ttgtcctcga acttctgatt      180
36      gtaggtggtg ccaccattgt taggattgat gtttccaatc cactcaaggc tctttccatg      240
37      gctctgcttc acccagtgtg ttgtatatc agtgaatgtg tatccagaag tcttgaggga      300
38      tatectcact gaagtcccag gcttcaccag ttcagggtcca gactgttgca gctggacctc      360
39      agagaggaca cctgcagttc ctagcaggag a                                391
40 <210> SEQ ID NO: 3
41 <211> LENGTH: 123
42 <212> TYPE: PRT
43 <213> ORGANISM: Mus sp.

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49 &lt;400&gt; SEQUENCE: 3

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50   Ser Pro Val Arg Asn Cys Arg Cys Pro Leu Gly Pro Ala Ala Thr Val
51   1           5           10           15
52   Trp Thr Thr Gly Glu Ala Trp Asp Phe Ser Glu Asp Ile Leu Gln Asp
53           20           25           30
54   Phe Trp Ile His Ile His Ile Tyr His Thr Leu Gly Glu Ala Glu Pro
55           35           40           45
56   Trp Lys Glu Pro Val Asp Trp Lys His Gln Ser Gln Trp Trp Tyr His
57           50           55           60
58   Leu Gln Ser Glu Val Arg Gly Gln Gly His Ile Asp Cys Arg Gln Val
59   65           70           75           80
60   Leu Gln Tyr Ser Leu His Gly Ala Pro Gln Pro Asn Ile Gly Phe Cys
61           85           90           95
62   Ser Leu Leu Leu Cys Ser Trp Leu Glu Leu Leu Leu Gly Pro Arg His
63           100          105          110
64   His Ser His Ser Leu Leu Ser Gln Asn Asp Thr
65           115          120

```

67 &lt;210&gt; SEQ ID NO: 4

68 &lt;211&gt; LENGTH: 130

69 &lt;212&gt; TYPE: PRT

70 &lt;213&gt; ORGANISM: Mus sp.

71 &lt;400&gt; SEQUENCE: 4

```

72   Leu Leu Ser Gly Thr Ala Gly Val Leu Ser Glu Val Gln Leu Gln Gln
73   1           5           10           15
74   Ser Gly Pro Glu Leu Val Lys Pro Gly Thr Ser Val Arg Ile Ser Cys
75           20           25           30
76   Lys Thr Ser Gly Tyr Thr Phe Thr Glu Tyr Thr Ile His Trp Val Lys
77           35           40           45
78   Gln Ser His Gly Lys Ser Leu Glu Trp Ile Gly Asn Ile Asn Pro Asn
79           50           55           60
80   Asn Gly Gly Thr Thr Tyr Asn Gln Lys Phe Glu Asp Lys Ala Thr Leu
81   65           70           75           80
82   Thr Val Asp Lys Ser Ser Ser Thr Ala Tyr Met Glu Leu Arg Ser Leu
83           85           90           95
84   Thr Ser Glu Asp Ser Ala Val Tyr Tyr Cys Ala Ala Gly Trp Asn Phe
85           100          105          110
86   Asp Tyr Trp Gly Gln Gly Thr Thr Leu Thr Val Ser Ser Ala Lys Thr
87           115          120          125
88   Thr Pro
89           130

```

91 &lt;210&gt; SEQ ID NO: 5

92 &lt;211&gt; LENGTH: 125

93 &lt;212&gt; TYPE: PRT

94 &lt;213&gt; ORGANISM: Mus sp.

95 &lt;400&gt; SEQUENCE: 5

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96   Leu Ser Cys Gln Glu Leu Gln Val Ser Ser Leu Arg Ser Ser Cys Asn
97   1           5           10           15
98   Ser Leu Asp Leu Asn Trp Ser Leu Gly Leu Gln Gly Tyr Pro Ala Arg
99           20           25           30

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100   Leu Leu Asp Thr His Ser Leu Asn Ile Pro Tyr Thr Gly Ser Arg Ala
101           35              40              45
102   Met Glu Arg Ala Leu Ser Gly Leu Glu Thr Ser Ile Leu Thr Met Val
103           50              55              60
104   Val Pro Pro Thr Ile Arg Ser Ser Arg Thr Arg Pro His Leu Thr Ser
105           65              70              75              80
106   Pro Pro Val Gln Pro Thr Trp Ser Ser Ala Ala His Leu Arg Ile Leu
107           85              90              95
108   Gln Ser Ile Ile Val Gln Leu Val Gly Thr Leu Thr Thr Gly Ala Lys
109           100             105             110
110   Ala Pro Leu Ser Gln Pro Ser Gln Pro Lys Arg His Pro
111           115             120             125
113 <210> SEQ ID NO: 6
114 <211> LENGTH: 345
115 <212> TYPE: DNA
116 <213> ORGANISM: Mus sp.
117 <400> SEQUENCE: 6
118   gaggtccagc tgcaacagtc tggacctgaa ctggtgaagc ctgggacttc agtgaggata      60
119   tcctgcaaga cttctggata cacattcact gaatatacca tacactgggt gaagcagagc      120
120   catggaaaga gccttgagtg gattggaaac atcaatccta acaatgggtg taccacctac      180
121   aatcagaagt tcgaggacaa ggccacattg actgtagaca agtcctccag tacagcctac      240
122   atggagctcc gcagcctaac atctgaggat tctgcagtct attattgtgc agctgggttg      300
123   aactttgact actggggcca aggcaccact ctcacagtct cctca                      345
125 <210> SEQ ID NO: 7
126 <211> LENGTH: 345
127 <212> TYPE: DNA
128 <213> ORGANISM: Mus sp.
129 <400> SEQUENCE: 7
130   tgaggagact gtgagagtgg tgccttggcc ccagtagtca aagttccaac cagctgcaca      60
131   ataatagact gcagaatcct cagatgttag gctgcggagc tccatgtagg ctgtactgga      120
132   ggacttgtct acagtcaatg tggccttgtc ctogaacttc tgattgtagg tggtaaccacc      180
133   attgttagga ttgatgtttc caatccactc aaggctcttt ccatggctct gcttcaccca      240
134   gtgtatggtg tattcagtga atgtgtatcc agaagtcttg caggatatcc tcaactgaagt      300
135   cccaggcttc accagttcag gtccagactg ttgcagctgg acctc                      345
137 <210> SEQ ID NO: 8
138 <211> LENGTH: 115
139 <212> TYPE: PRT
140 <213> ORGANISM: Mus sp.
141 <400> SEQUENCE: 8
142   Glu Val Gln Leu Gln Gln Ser Gly Pro Glu Leu Val Lys Pro Gly Thr
143   1              5              10              15
144   Ser Val Arg Ile Ser Cys Lys Thr Ser Gly Tyr Thr Phe Thr Glu Tyr
145           20              25              30
146   Thr Ile His Trp Val Lys Gln Ser His Gly Lys Ser Leu Glu Trp Ile
147           35              40              45
148   Gly Asn Ile Asn Pro Asn Asn Gly Gly Thr Thr Tyr Asn Gln Lys Phe
149           50              55              60
150   Glu Asp Lys Ala Thr Leu Thr Val Asp Lys Ser Ser Ser Thr Ala Tyr
151           65              70              75              80

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152      Met Glu Leu Arg Ser Leu Thr Ser Glu Asp Ser Ala Val Tyr Tyr Cys
153              85                      90                      95
154      Ala Ala Gly Trp Asn Phe Asp Tyr Trp Gly Gln Gly Thr Thr Leu Thr
155              100                      105                      110
156      Val Ser Ser
157              115
159 <210> SEQ ID NO: 9
160 <211> LENGTH: 363
161 <212> TYPE: DNA
162 <213> ORGANISM: Mus sp.
163 <400> SEQUENCE: 9
164      ttatatggag ctgatgggaa cattgtaatg acccaatctc ccaaattccat gtccatgtca      60
165      gtaggagaga gggtcacctt gacctgcaag gccagtgaga atgtgggttac ttatgtttcc      120
166      tggtatcaac agaaaccaga gcagtctcct aaactgctga tatacggggc atccaaccgg      180
167      tacactgggg tccccgatcg cttcacaggc agtggatctg caacagattt cactctgacc      240
168      atcagcagtg tgcaggctga agaccttgca gattatcact gtggacaggg ttacagctat      300
169      ccgtacacgt tcggaggggg gaccaagctg gaaataaaac gggctgatgc tgcaccaact      360
170      gta      363
172 <210> SEQ ID NO: 10
173 <211> LENGTH: 363
174 <212> TYPE: DNA
175 <213> ORGANISM: Mus sp.
176 <400> SEQUENCE: 10
177      tacagttggt gcagcatcag cccgttttat ttccagcttg gtccccctc cgaacgtgta      60
178      cggatagctg taacctgtgc cacagtgata atctgcaagg tcttcagcct gcacactgct      120
179      gatggtcaga gtgaaatctg ttgcagatcc actgcctgtg aagcgatcgg ggaccccgat      180
180      gtaccgggtt gatgccccgt atatcagcag tttaggagac tgctctgggt tctgttgata      240
181      ccaggaaaca taagtaacca cattctcact ggccttgcat gtcaagggtga ccctctctcc      300
182      tactgacatg gacatggatt tgggagattg ggtcattaca atgttcccat cagctccata      360
183      taa      363
185 <210> SEQ ID NO: 11
186 <211> LENGTH: 121
187 <212> TYPE: PRT
188 <213> ORGANISM: Mus sp..
189 <400> SEQUENCE: 11
190      Leu Tyr Gly Ala Asp Gly Asn Ile Val Met Thr Gln Ser Pro Lys Ser
191      1              5              10              15
192      Met Ser Met Ser Val Gly Glu Arg Val Thr Leu Thr Cys Lys Ala Ser
193              20              25              30
194      Glu Asn Val Val Thr Tyr Val Ser Trp Tyr Gln Gln Lys Pro Glu Gln
195              35              40              45
196      Ser Pro Lys Leu Leu Ile Tyr Gly Ala Ser Asn Arg Tyr Thr Gly Val
197      50              55              60
198      Pro Asp Arg Phe Thr Gly Ser Gly Ser Ala Thr Asp Phe Thr Leu Thr
199      65              70              75              80
200      Ile Ser Ser Val Gln Ala Glu Asp Leu Ala Asp Tyr His Cys Gly Gln
201              85              90              95
202      Gly Tyr Ser Tyr Pro Tyr Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile
203              100              105              110

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204      Lys Arg Ala Asp Ala Ala Pro Thr Val
205          115                      120
207 <210> SEQ ID NO: 12
208 <211> LENGTH: 114
209 <212> TYPE: PRT
210 <213> ORGANISM: Mus sp.
211 <400> SEQUENCE: 12
212      Tyr Met Glu Leu Met Gly Thr Leu Pro Asn Leu Pro Asn Pro Cys Pro
213          1                      5                      10                      15
214      Cys Gln Glu Arg Gly Ser Pro Pro Ala Arg Pro Val Arg Met Trp Leu
215          20                      25                      30
216      Leu Met Phe Pro Gly Ile Asn Arg Asn Gln Ser Ser Leu Leu Asn Cys
217          35                      40                      45
218      Tyr Thr Gly His Pro Thr Gly Thr Leu Gly Ser Pro Ile Ala Ser Gln
219          50                      55                      60
220      Ala Val Asp Leu Gln Gln Ile Ser Leu Pro Ser Ala Val Cys Arg Leu
221          65                      70                      75                      80
222      Lys Thr Leu Gln Ile Ile Thr Val Asp Arg Val Thr Ala Ile Arg Thr
223          85                      90                      95
224      Arg Ser Glu Gly Gly Pro Ser Trp Lys Asn Gly Leu Met Leu His Gln
225          100                     105                     110
226      Leu Tyr
228 <210> SEQ ID NO: 13
229 <211> LENGTH: 116
230 <212> TYPE: PRT
231 <213> ORGANISM: Mus sp.
232 <400> SEQUENCE: 13
233      Ile Ile Trp Ser Trp Glu His Cys Asn Asp Pro Ile Ser Gln Ile His
234          1                      5                      10                      15
235      Val His Val Ser Arg Arg Glu Gly His Leu Asp Leu Gln Gly Gln Glu
236          20                      25                      30
237      Cys Gly Tyr Leu Cys Phe Leu Val Ser Thr Glu Thr Arg Ala Val Ser
238          35                      40                      45
239      Thr Ala Asp Ile Arg Gly Ile Gln Pro Val His Trp Gly Pro Arg Ser
240          50                      55                      60
241      Leu His Arg Gln Trp Ile Cys Asn Arg Phe His Ser Asp His Gln Gln
242          65                      70                      75                      80
243      Cys Ala Gly Arg Pro Cys Arg Leu Ser Leu Trp Thr Gly Leu Gln Leu
244          85                      90                      95
245      Ser Val His Val Arg Arg Gly Asp Gln Ala Gly Asn Lys Thr Gly Cys
246          100                     105                     110
247      Cys Thr Asn Cys
248          115
250 <210> SEQ ID NO: 14
251 <211> LENGTH: 321
252 <212> TYPE: DNA
253 <213> ORGANISM: Mus sp.
254 <400> SEQUENCE: 14
255      aacattgtaa tgaccaatc tcccaaatcc atgtccatgt cagtaggaga gagggtcacc

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**VERIFICATION SUMMARY**

PATENT APPLICATION: US/09/929,546

DATE: 04/03/2002

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